

North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 161

Reporting Period: Jan 11 - Aug 11

Vehicle Technologies Program

Date range of data received:

1/1/2011 to 8/31/2011

Number of days the vehicles were driven: 243

All Trips Combined

Overall gasoline fuel economy (mpg)	46
Overall AC electrical energy consumption (AC Wh/mi) ¹	48
Overall DC electrical energy consumption (DC Wh/mi) ²	33
Total number of trips	65,997
Total distance traveled (mi)	571,122

Trips in Charge Depleting (CD) mode ³

Gasoline fuel economy (mpg)	61
DC electrical energy consumption (DC Wh/mi) ⁴	145
Number of trips	23,931
Percent of trips city / highway	88% / 12%
Distance traveled (mi)	101,649
Percent of total distance traveled	18%

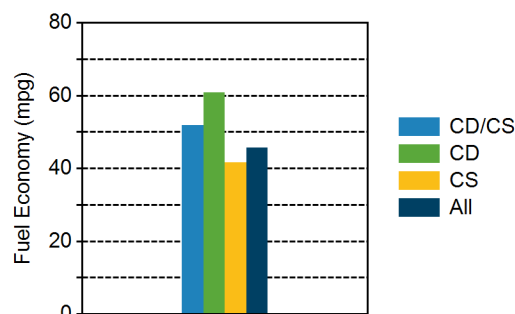
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes ⁵

Gasoline fuel economy (mpg)	52
DC electrical energy consumption (DC Wh/mi) ⁶	50
Number of trips	3,637
Percent of trips city / highway	49% / 51%
Distance traveled (mi)	89,094
Percent of total distance traveled	16%

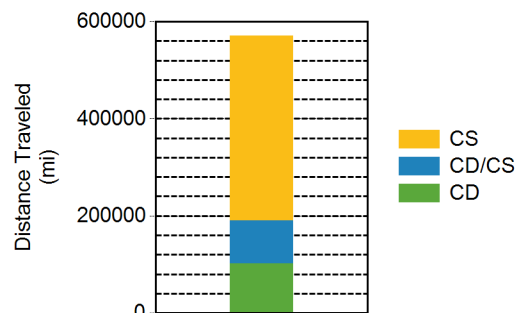
Trips in Charge Sustaining (CS) mode ⁷

Gasoline fuel economy (mpg)	42
Number of trips	38,429
Percent of trips city / highway	80% / 20%
Distance traveled (mi)	380,378
Percent of total distance traveled	67%
Number of trips when the plug-in battery pack was turned off by the vehicle operator ⁸	4274
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) ⁹	70,003

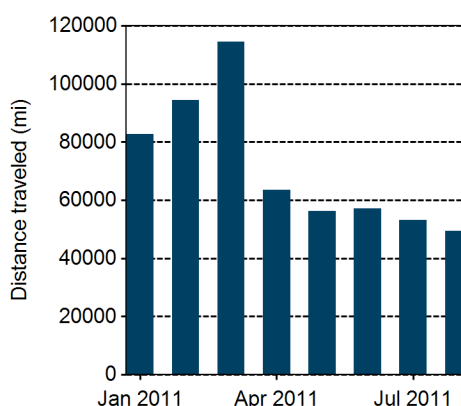
Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



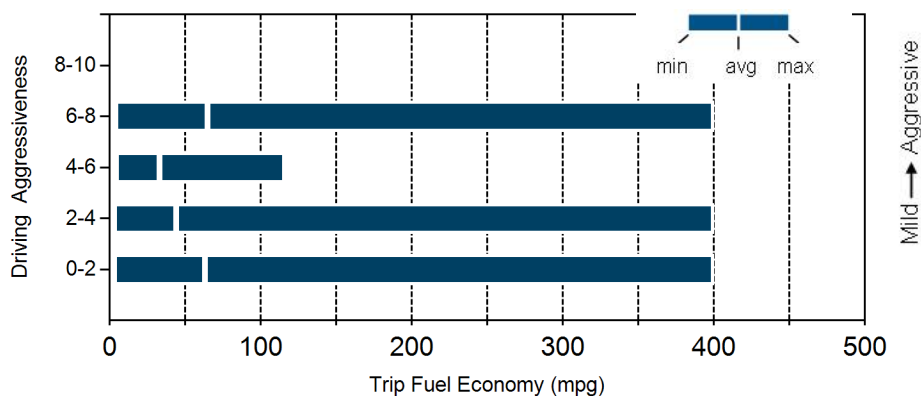
Miles Logged by Month This Year



Notes: 1 - 9. Please see <http://avt.inl.gov/pdf/phev/ReportNotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

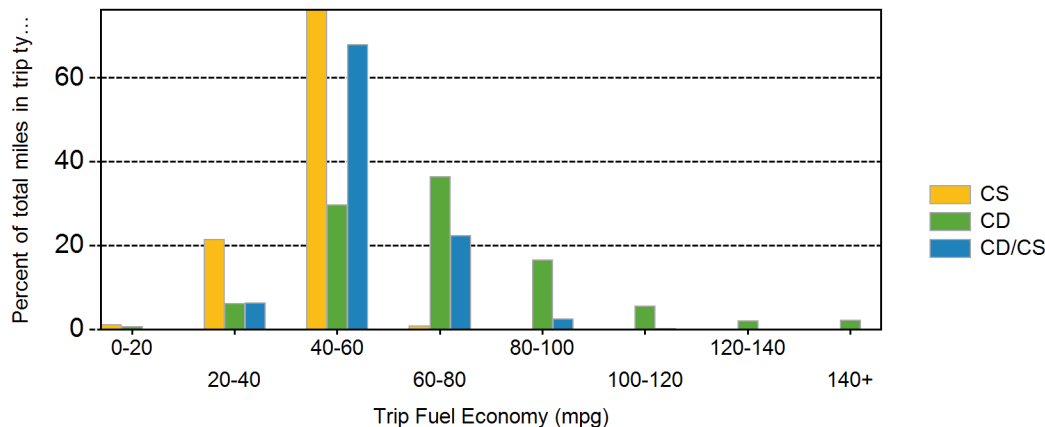
Trips in Charge Depleting (CD) mode		City	Highway
Gasoline fuel economy (mpg)		58	66
DC electrical energy consumption (DC Wh/mi)		167	111
Percent of miles with internal combustion engine off		33%	19%
Average trip aggressiveness (on scale 0 - 10)		1.8	1.8
Average trip distance (mi)		2.9	14.4
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes			
Gasoline fuel economy (mpg)		49	52
DC electrical energy consumption (DC Wh/mi)		79	44
Percent of miles with internal combustion engine off		27%	11%
Average trip aggressiveness (on scale 0 - 10)		1.9	1.6
Average trip distance (mi)		7.6	40.8
Trips in Charge Sustaining (CS) mode			
Gasoline fuel economy (mpg)		35	45
Percent of miles with internal combustion engine off		22%	9%
Average trip aggressiveness (on scale 0 - 10)		2.0	1.7
Average trip distance (mi)		3.4	35.7

Effect Of Driving Aggressiveness on Fuel Economy This Year



Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.

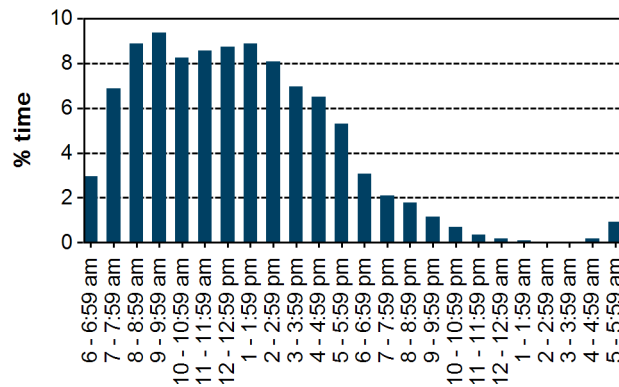
Trip Fuel Economy Distribution By Trip Type



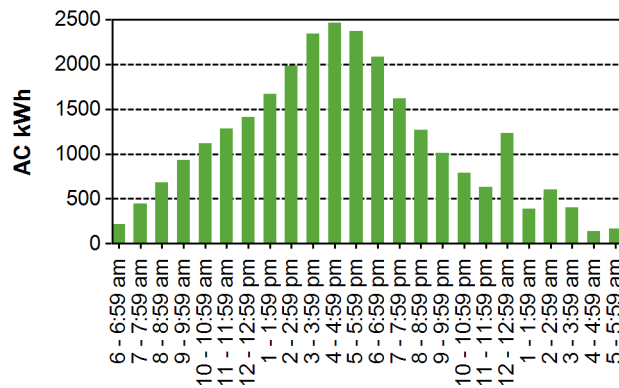
Plug-in charging

Average number of charging events per vehicle per month when driven	12
Average number of charging events per vehicle per day when vehicle driven	0.8
Average distance driven between charging events (mi)	56.7
Average number of trips between charging events	6.6
Average time plugged in per charging event (hr)	27.3
Average time charging per charging event (hr)	2.7
Average energy per charging event (AC kWh)	2.7
Average charging energy per vehicle per month (AC kWh)	31.3
Total number of charging events	10,074
Total charging energy (AC kWh)	27,250

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

